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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
PATENT OPERATION

Applicants:)	
Hiroyuki Minamikawa et al.)	Examiner: Karl Group
Serial Number: 09/841,614)	Group Art Unit:1755
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Title: LOW EXPANSION TRANSPARENT GLASS-CERAMICS, GLASS-CERAMIC
SUBSTRATE AND OPTICAL WAVEGUIDE ELEMENT

New York, NY 10036
February 23, 2004

Mail Stop Non-Fee Amendments
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRELIMINARY AMENDMENT

This Amendment is being filed prior to examination to amend
the claims:

IN THE CLAIMS

1. (currently amended) Low expansion transparent glass-ceramics obtained by heat treating a base glass produced at a melting temperature of 1530° or below, said glass-ceramics containing 0.5 - 2% of CaO on the basis of the amount of total oxides having an average linear thermal expansion coefficient (α) within a range from $+6 \times 10^{-7}/^{\circ}\text{C}$ to $+35 \times 10^{-7}/^{\circ}\text{C}$ within a temperature range from 100° to 300° and having 80% transmittance wavelength (T_{80}) of 700nm or below.